

Translation

PATENT COOPERATION TREATY

PCT/FR2003/001418



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/FR2003/001418 | International filing date (<i>day/month/year</i>) 07 mai 2003 (07.05.2003) | Priority date (<i>day/month/year</i>) 07 mai 2002 (07.05.2002) |
| International Patent Classification (IPC) or national classification and IPC B32B 17/10 | | |
| Applicant SAINT-GOBAIN GLASS FRANCE | | |

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|---|--|
| <p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of _____ sheets.</p> | |
| <p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p> | |

| | |
|--|---|
| Date of submission of the demand 02 septembre 2003 (02.09.2003) | Date of completion of this report 25 May 2004 (25.05.2004) |
| Name and mailing address of the IPEA/EP | Authorized officer |
| Facsimile No. | Telephone No. |

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FR2003/001418

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages _____ 1-6 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages _____ 1-11 _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the drawings:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FR 03/01418

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | | |
|-------------------------------|--------|---------------|-----|
| Novelty (N) | Claims | 3, 4, 5, 8-11 | YES |
| | Claims | 1, 2, 6, 7 | NO |
| Inventive step (IS) | Claims | 3 | YES |
| | Claims | 1, 5-9 | NO |
| Industrial applicability (IA) | Claims | 1-11 | YES |
| | Claims | | NO |

2. Citations and explanations

1. Reference is made to the following documents:

D1: US-A-3630809

D2: GB-A-1470844

2. The international application concerns laminated glazing which comprises a tinted binder layer, a transparent binder layer and, between these two layers, a film as an intermediate layer used to separate the two binder layers. Owing to this separation, optical disturbances observed at the edge of the coloured layer and of the transparent layer are eliminated.

PCT Article 33(2) and (3)

3.1 Claims 1, 2, 6 and 7 lack novelty with respect to the disclosure in D1.

Figures 1 and 2 in D1 show laminated glazing that contains an infrared-reflecting C₂ film arranged between two adhesive layers (3, 15), which are preferably made of polyvinyl butyral (see the

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explanations in column 4, line 69 ff.) and connect the anti-sun film to two sheets of glass.

- 3.2 The problem addressed by the present invention is that of preventing optical disturbances caused by fluctuations in the thickness of the adhesive layers.

It would appear that these disturbances are the result of a particular effect of the interaction between a tinted adhesive film and a transparent adhesive film when these films have been produced by a method which gives rise to surface features well known in the art of laminated glazing, that is, a certain degree of roughness.

D2 (page 3, lines 9 to 39) indicates that a smooth surface is produced on one face of an intermediate layer which is to be printed with a tint. No mention is made of disturbances.

The step of introducing an intermediate film that separates the two adhesive layers solves the problem of interest.

This film would appear to reduce interaction between the two layers.

This effect is to be expected when the thickness of an intermediate layer is such that any interaction between a first adhesive film and a second adhesive film is impossible.

A laminated structure comprising, for example, three glass sheets of approximately the same thickness,

separated by two adhesive intermediate films, is equivalent to two individual glazing units.

It is unexpected for one intermediate film to influence another through the glass in the centre of the laminated structure.
Clearly, this problem does not arise.

The use of an intermediate layer which is rigid and can itself be considered a rigid glass sheet thus does not involve an inventive step; see the current claim 5. Since the features of claim 5 are included in claim 1, the same conclusion applies to the independent claim.

- 3.3 Since no limits are provided for the thickness of the intermediate layer, it would appear that the requirements of PCT Article 33(3) cannot be met.
4. Claims 2, 3 and 6 are not supported by the description (PCT Article 6).